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Docket No. 29595-82608

*** * REASONS FOR AMENDMENTS AND REMARKS * ***

Applicants wish to acknowledge with appreciation the Examiner's analysis and efforts in examining this application.

On pages 2-4 of the Official Action, the Examiner rejected Claims 19-20 and 24-26 under 35 U.S.C. § 103(a) as being obvious under Spengler (U.S. Patent No. 6,287,678) in view of Holtrop et al. (U.S. Patent No. 4,557,970). The Examiner determined that Spengler is directed to a composite structural panel suitable for interior trim panels for motor vehicles (column 1, lines 15-28).

The Examiner alleges that in Claims 19 and 20, Spengler teaches a thermoplastic foam core sandwiched between two outer layers that each respectively comprise natural fibers intermixed with thermoplastic material (column 2, lines 20-35). The Examiner continued that the composite panel further comprises a decorative fabric laminated onto the structure (column 3, lines 1-15). The foam core comprises polypropylene expanded beads and the outer layers comprise a polyolefin such as polypropylene and one or more natural plant fibers such as cotton, straw, flax, hemp, jute, sisal, kenaf or wood (column 2, lines 64-68). The outer layers are thermal fusion bonded onto the foam core (column 7, lines 1-20). The foam core and the two outer layers collectively are equated to Applicant's "headliner core layer". The Examiner further notes that the term fabric by definition encompasses woven fabrics. The decorative fabric is equated to "woven fiber layer".

The Examiner concedes that Spengler fails to teach that the "headliner core layer" and the "woven fiber layer" are sandwiched between two film layers, one being a permeability-resistance film layer. The Examiner contends, however, that Holtrop et al. is directed to a laminate structure with improved acoustical absorption (Title). Holtrop allegedly teaches a structure having multiple foamed layers and thermoplastic films adhesively bonded to at least the

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outer surface of the first and third layers of foamed thermoplastic material (column 2, lines 30-40). The film is placed on both sides of the composite to prevent the layers from bowing, for instance, due to moisture absorption (column 4, lines 25-35). It is the Examiner's position that the film layers would be impermeable meeting Applicant's requirement of "permeability resistance film layer". The Examiner concluded that it would have been obvious to use the film layers on the outer surfaces of the composite of Spengler as suggested by Holtrop motivated by the desire to prevent the composite layers from bowing.

Pursuant an interview between the undersigned and the Examiner, along with the Examiner's supervisor on October 11, 2005, and pursuant an alternative amendment to Claim 19 submitted on October 19, 2005, and approved by the Examiner and her supervisor on October 25, 2005, it is respectfully submitted this rejection is moot. As indicated in the interview summary report mailed October 17, 2005, the Examiner and her supervisor indicated that adding the word "single" to the headliner core layer would make the claim allowable over the Spengler reference. However, because of the unduly narrowing nature of the word "single," the undersigned faxed the Examiner alternative language on October 19, 2005. This alternative language adds the limitation "natural fibers dispersed throughout the layer's thickness" to the claim 19.¹ The Examiner subsequently indicated via voice mail on October 25, 2005, that she and her supervisor approved the amendment as allowable over Spengler and that sufficient support for the amendment exists in the specification.² Accordingly, it is respectfully requested that this rejection be withdrawn.

The Examiner further alleges that in Claims 20, 24, and 26, Spengler in view of Holtrop discloses the claimed invention except for that the binding resin is present in the amount of 25-35% by weight, the sisal is present in an amount of about 35-45% by weight and the

¹ The limitation "sisal" was also removed from the claim and added as dependent Claim 42.

² It is not intended that the added limitation recited above and the deleted limitation "single" be considered synonymous. Although the added limitation avoids the disclosure of Spengler, certain multi-layer headliner cores may be contemplated within the scope of the claim, so long as they meet the added limitation either literally or equivalently.

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natural filler fibers are present in the amount of about 25-35% by weight and the film layer is 4 mil. It would have been obvious to one having ordinary skill in the art at the time the invention was made, according to the Examiner, to create a composite comprising binding resin present in the amount of 25-35% by weight, the sisal is present in an amount of about 35-45% by weight, the natural filler fibers are present in the amount of about 25-35% by weight, and the film layer is 4 mil. The Examiner continued that in Claim 25, Spengler in view of Holtrop discloses the claimed invention except for that the binding resin is a nylon film layer. It would have been obvious to one having ordinary skill in the art at the time the invention was made, according to the Examiner, to use a nylon film layer. The Examiner alleges that one would have been motivated to use nylon due to its excellent strength, flexibility, toughness and elasticity.

It is respectfully submitted that in light of the amendments made to Claim 19, these rejections are now moot as well. This would also apply to added dependent claims 42 and 43. In any event, with respect to sisal, these fibers provide stiffness as well as loft and standoff in high temperature environments. (See page 7 of the application, for example.) Such is a particular characteristic not expressed in the Spengler reference. It would, therefore, not be expected to create a headliner having the composition that includes sisal in the amounts expressed in Claim 20. Nor does the prior art disclose the 4 mil film layer, for similar reasons. Accordingly, it is respectfully requested that these rejections be withdrawn.

On pages 4-7 of the Official Action, the Examiner rejected Claims 19-26 under 35 U.S.C. § 103(a) as being obvious under La Marca, II et al. (U.S. Patent No. 5,456,976) in view of JP 01702836 A. The Examiner determined that La Marca is directed to a flexible laminate suitable for interior trim panels (column 1, lines 10-15).

The Examiner alleges that in Claim 19 La Marca teaches that the composite comprises an aesthetically pleasing facing layer A; a soft, resilient cellular polymer intermediate layer B and a non-cellular thermoplastic film backing layer C (column 4, lines 30-37). Layer A

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can comprise a structure composed of one or more elements of a woven, non-woven, or knitted textile and/or of one or more elements of a polymer sheet or film (column 4, lines 60-68). The Examiner equates the woven fabric of layer A to Applicant's "woven fiber layer" and the polymer sheet or film to Applicant's "film layer". Layer B can comprise synthetic or natural thermosetting or thermoplastic cellular polymer (column 5, lines 1-15). The Examiner equates layer B to Applicant's "headliner core layer". The film backing layer C can comprise a flexible, non-cellular, homogenous flexible polymeric film (column 5, lines 15-35). The Examiner equates layer C to Applicant's "permeability-resistance film layer".

The Examiner contends that La Marca teaches in Claim 21 that the woven layer can comprise polyester (column 4, lines 35-45). In Claim 22, the Examiner alleges that La Marca teaches that the woven layer can comprise a mixture of synthetic and natural fibers such as polyester/cotton (column 4, lines 20-45). The Examiner further alleges that La Marca teaches in Claim 23 that the film can comprise polypropylene (column 5, lines 19-35).

The Examiner acknowledged that La Marca fails to teach that the soft, resilient cellular polymer intermediate layer B, or Applicant's "core", further comprises sisal fibers and randomly-oriented filler fibers. The Examiner alleges, however, that JP 01702836 A teaches a core for a car interior trim formed by thermosetting resin form and comprising sisal among other natural fibers used as stiff and rigid reinforcing material. The core is lightweight and has good mechanical strength (Abstract). The Examiner states that it should be noted that JP 01702836 A does not specifically teach that a combination of natural fibers can be used (i.e., sisal and other natural fibers). However, Applicant's claim language does not preclude the interpretation of the sisal fibers also being the natural filler fibers. If the Applicant requires that the sisal fibers are different than the natural filler fibers, the Applicant should amend the claim accordingly. The Examiner concludes that it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate reinforcing fibers such as sisal as suggested by JP

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017028236 A in the core of La Marca motivated by the desire to create a lightweight core having improved mechanical strength.

During the interview with the Examiner and her supervisor on October 11, 2005, they acknowledged that the Japanese reference was not clear and that a translation had been ordered. In any event, Figures 3 and 4 from that reference, along with its statements in the translated abstract, indicate that this reference is not dissimilar to the foam and fiber layers disclosed in Spengler. This being the case, the combination of the Japanese and La Marca references do not disclose the claimed invention. Furthermore, despite the teachings of the Japanese reference, it is not believed that the combination of it and La Marca teach the claimed invention. La Marca requires a cellular polymer layer without any natural fibers, as the Examiner has already indicated. Removal of the cellular polymer layer in favor of some fiber/polymer layer would destroy the invention of La Marca. It would no longer be a composite having film layers bounding a purely cellular polymer layer. Adding the Japanese reference, to the extent it has fiber layers, would require removal of the polymer layer. This would be impermissible hindsight reconstruction pursuant MPEP Section 2144.06.

Because there is a clarity problem with the Japanese reference, the applicants respectfully request that if any new rejection be made or sustained based on the translation of the reference, any future Office Action be made non-final. Otherwise, the applicants would not have had adequate opportunity to respond to the translated version of the reference.

The Examiner further alleges the La Marca and the JP 01702836 references serve as the basis for rejections to Claims 20 and 24-26 for reasons similar to those previously recited. It is respectfully believed, however, that these rejections are moot in light of the amendments approved by the Examiner, as previously discussed. Accordingly, it is respectfully requested that these rejections be withdrawn.

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If, upon consideration of the above, the Examiner should feel that there remain outstanding issues in the present application that could be resolved, the Examiner is invited to contact Applicants' patent counsel at the telephone number given below to discuss such issues.

To the extent necessary, a petition for an extension of time under 37 C.F.R. §1.136 is hereby made. To the extent additional fees are required, please charge the fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 02-1010 (29595/82608) and please credit any excess fees to such deposit account.

Respectfully submitted,



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